

INTRODUCTION

Cellulitis is a bacterial infection that is painful and can spread rapidly under the skin. It's a common condition, particularly in those with underlying disease, poor circulation or a weak immune system and can progress to cause serious illness.

The most common infective organisms in adults are streptococci (esp. *Strep. pyogenes*) and *Staph. Aureus*. (1)



Common Symptoms of Cellulitis



Redness



Warmth



Red streaking



Pain or tenderness



Swelling



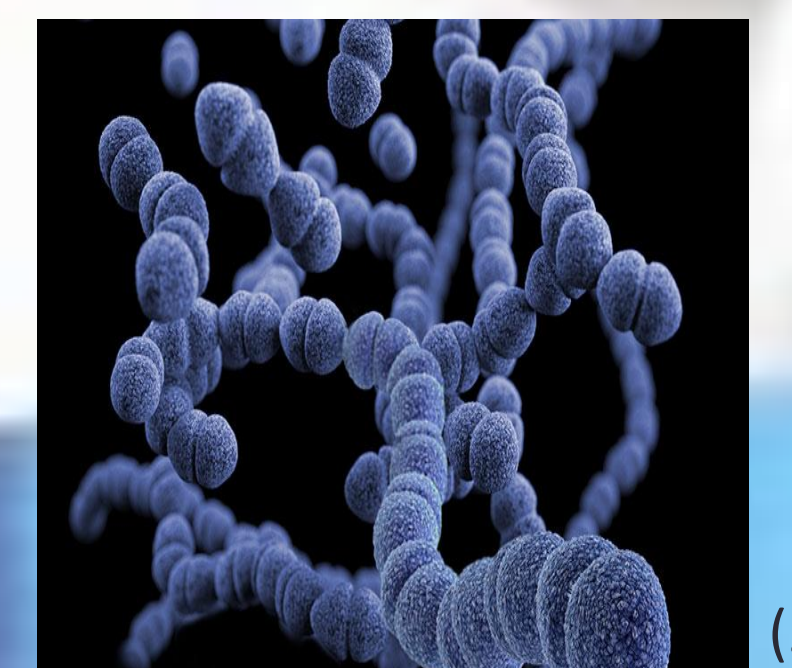
Leaking of yellow, clear fluid or pus

(1)

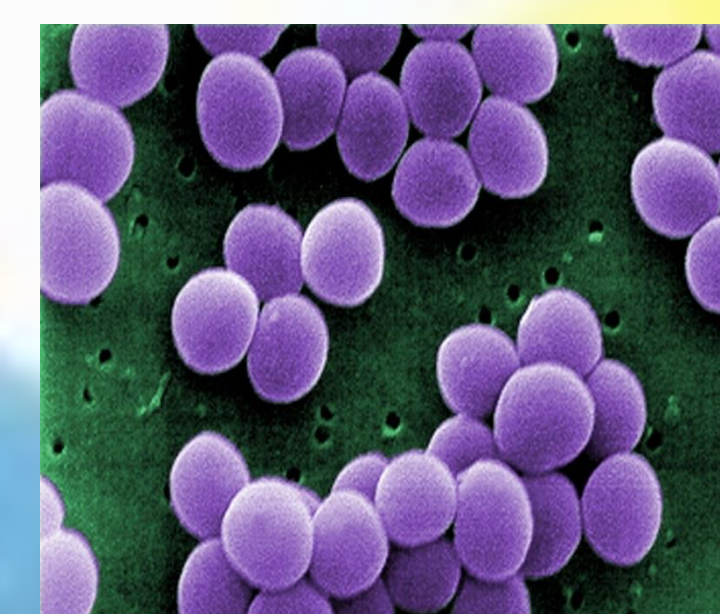
Non purulent infection

purulent infection

Types of cellulitis



(2)



(2)

TREATMENT OF NON PURULENT

Non purulent infection : infection without any drained abscess

Recurrent infection — Recurrent cellulitis is common; 22 to 49 percent of patients with cellulitis report at least one prior episode Recurrences occur in approximately 14 percent of cellulitis cases within one year and 45 percent of cases within three years, usually in the same location , Antibiotic options for suppressive therapy include:

- For patients with known or presumed beta-hemolytic streptococcal infection
 - penicillin V (250 to 500 mg orally twice daily)
 - Erythromycin (250 mg orally twice daily)
 - For patients with known or presumed staphylococcal infection
 - Clindamycin(150 mg orally once daily)
 - Trimethoprim-sulfamethoxazole (tablet orally twice daily)
- Suppressive therapy may be continued for several months with interval assessments for efficacy and tolerance.
- June 2016 five trials with a total of over 500 patients with at least one prior episode of cellulitis, prophylactic antibiotic use reduced the risk of subsequent cellulitis 69% less likely to have a repeat episode of cellulitis. (1)

TREATMENT OF PURULENT

Purulent infection — Purulent infection refers to presence of a drainable abscess or cellulitis associated with purulent drainage

Recurrent infection :

Options for empiric oral therapy of purulent infection include Clindamycin, Trimethoprim-sulfamethoxazole, or tetracycline (doxycycline or minocycline) randomized trial that included 524 patients with uncomplicated skin infections, including both cellulitis and abscesses (cure rates for clindamycin and TMP-SMX were 80 and 78 percent, respectively) Options for empiric parenteral therapy of MRSA include vancomycin and daptomycin .(1)

Conclusion

The approach to treatment mainly depends on whether or not the recurrence of infection is associated with it being purulent, if so the treatment should aim to treat MRSA, for those with non purulent infections an administration of suppressive antibiotic therapy is suggested

The duration of therapy should be individualized depending on clinical response

References:

- 1-<https://www.uptodate.com/contents/cellulitis-and-skin-abscess-in-adults-treatment>
- 2- Eells SJ, Chira S,David CG,Craft N,Miller LG. Non-suppurative cellulitis: risk factors and its association with *Staphylococcus aureus* colonization in an area of endemic community-associated methicillin-resistant *S. aureus* infections, *Epidemiol Infect*,2011, vol.139.